

2. KEY SITE PERSONNEL RESPONSIBILITIES

The organizational structure for this project reflects the resources and expertise required to perform the work while minimizing risks to worker health and safety, the environment, and the general public. Key project positions at the INEEL, lines of responsibility and communication, and the project within the ERP structure are shown on the organization chart for the site (see Figure 2-1). This organization chart is not all-inclusive, but shows the structure for resources assigned to the ISG project. The following sections outline the responsibilities of key site personnel.

2.1 Environmental Restoration Program and Project Management

2.1.1 Environmental Restoration Director

The INEEL ER director has the ultimate responsibility for the technical quality of all projects, for maintaining a safe environment, and for the safety and health of all personnel during field activities performed by or for the ERP. The ER director provides technical coordination and interfaces with the DOE-ID Environmental Support Office. The ER director ensures that:

- Project and program activities are conducted according to all applicable federal, state, local, and company requirements and agreements
- Program budgets and schedules are approved and monitored to be within budgetary guidelines
- Personnel, equipment, subcontractors, and services are available
- Direction is provided for the development of tasks, evaluation of findings, development of conclusions and recommendations, and production of reports.

2.1.2 Environmental Restoration Safety, Health, and Quality Assurance Manager

The ERP safety, health, and quality assurance (SH&QA) manager, or designee, is responsible to manage SH&QA resources to ensure that SH&QA programs, policies, standards, procedures, and mandatory requirements are planned, scheduled, implemented, and executed in the day-to-day operations for the ERP at the INEEL. The manager directs the SH&QA compliance accomplishments of all activities by providing technical and administrative direction to subordinate staff, and through coordination with related functional entities. The ER SH&QA manager reports directly to the ER director. Under the direction of the ER director, the ER SH&QA manager represents the ER directorate in all SH&QA matters. This includes responsibility for ERP SH&QA management compliance and oversight for all ER CERCLA and decontamination, dismantlement, and decommissioning operations planned and conducted at WAG 7.

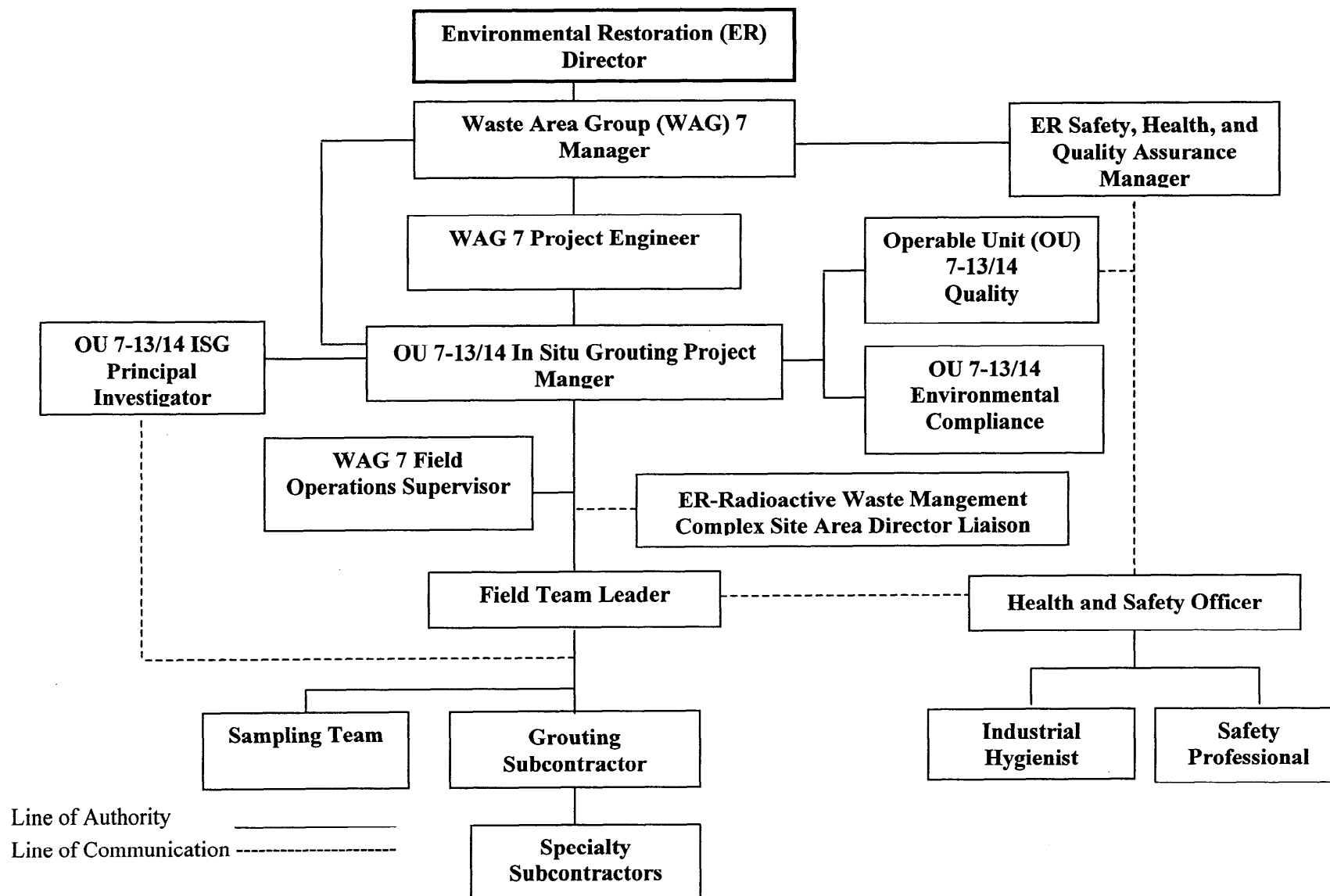


Figure 2-1. Operable Unit 7-13/14 in situ grouting project organization chart.

The ER SH&QA manager is responsible for the management of the following matrixed or facility-provided technical disciplines, and implementation of the programs related to these disciplines:

- Radiological controls personnel (RWMC support)
- Environmental support personnel
- Industrial safety personnel
- Fire protection personnel
- Quality assurance personnel
- Industrial hygiene personnel
- Emergency preparedness personnel.

2.1.3 Waste Area Group 7 Manager

The WAG 7 manager will ensure that all activities conducted during this project comply with INEEL management control procedures (MCPs) and program requirements directives (PRDs), all applicable OSHA, EPA, DOE, U.S. Department of Transportation, and state of Idaho requirements, and that tasks comply with PLN-694 and this HASP. The WAG 7 manager is responsible for the overall work scope, schedule, and budget for this project.

2.1.4 Project Engineer

The project engineer (PE) is responsible for the overall technical quality of the WAG 7 ER projects included in this HASP, as well as for the technical content and quality of project deliverables. Additional responsibilities of the PE include:

- Providing project-specific POC services for the recruitment and staffing of projects for the scientific, technical, and engineering staff
- Being cognizant and staying ahead of technical project issues focusing on planning, design, and execution of tasks to ensure compliance with environmental regulations, permits, INEEL policies, and DOE orders
- Maintaining close coordination with other key project POCs to maintain project schedules and milestones, and to develop action plans (as required) that meet project goals
- Coordinating and scheduling formal and informal reviews of all project-produced documentation to assure scientific, technical, and engineering excellence in the delivered product
- Coordinating and planning appropriate mitigation strategies to minimize long-term impacts of the tasks conducted
- Being responsible for technical oversight and direction in development and acceptance of products and deliverables
- Being responsible for technical staffing of the OU 7-13/14 ISG project
- Identifying scientific, technical, and engineering issues that affect the cost effectiveness, constructability, and operation or maintenance of systems developed for deployment.

2.1.5 In Situ Grouting Project Manager

The OU 7-13/14 ISG project manager (PM) is responsible for the scope, schedule, budget, and technical quality for OU 7-13/14 ISG project activities. Following the field tests, the PM will ensure all laboratory data, logbook entries, and relevant information are compiled into a summary report (or other document) in support of the WAG 7 RI/FS. The PM is responsible for management of subcontractors at the project site and the technical content and quality of all project deliverables. Additional responsibilities of the PE include:

- Providing technical oversight, direction, and acceptance of environmental products developed by project teams and project subcontractors
- Responsible for ensuring overall technical quality of project deliverables
- Monitoring and performing field activities in accordance with established cost and schedule
- Responsible for identifying startup requirements of new field activities and completing required management self or readiness assessment(s)
- Responsible for maintaining the *Interface Agreement Between Radioactive Waste Management Complex and Waste Area Group 7 Operable Unit 7-13/14 Treatability Studies Project*, IAG-15 (INEEL 2000b) with the RWMC.

2.1.6 In Situ Grouting Principal Investigator

The OU 7-13/14 ISG PI is responsible for ensuring all test objectives defined in the Implementation Test and Field Plan (Loomis et al. 2001) are met. The PI will interface with the PM and grouting subcontractors at the project site.

2.1.7 Waste Area Group 7 Field Operations Supervisor

The WAG 7 field operations supervisor serves as the principal POC for the identification of resources to ensure the successful completion of WAG 7 activities. Additional responsibilities include, but are not limited to, the following:

- Ensuring that the requirements of the project authorization basis are met
- Ensuring that project plan of the day (POD) meetings, tailgate safety meetings, and readiness reviews are performed, as required, and attended by the appropriate WAG 7 personnel
- Providing input to ER project weekly and monthly project reviews in the form of field progress photos, field operations metrics, field safety statistics and preventive measures, and field labor staffing projections and issues associated with any aspect of field operations
- Being responsible for interface with construction management personnel (including the subcontractor technical representative) to manage scope, schedule, and cost for field grouting activities (as required)
- Being responsible for all compliance and implementation of WAG 7 specific field operations, procedures, and requirements

- Providing input to the annual work plan in the form of resource-loaded schedules and staffing projections for field staff
- Coordinating all activities with the appropriate RWMC facilities maintenance and operations managers
- Interfacing with the RWMC landlord regarding office space
- Consulting with the PM, the PE, and the FTL on field labor staffing.

2.1.8 Waste Area Group 7 Radioactive Waste Management Complex Interface

The WAG 7 RWMC interface serves as the POC for coordination with the site area director (SAD), as appropriate. The RWMC interface provides advance notice to the SAD (or designee) of scheduled activities (including documents requiring RWMC review or approvals) that impact site area operations, and provides advance notice of site area operations that impact ER project activities.

2.1.9 Waste Area Group 7 SH&QA Point of Contact

The ER WAG 7 SH&QA POC, or designee, is responsible for managing SH&QA resources to ensure that SH&QA programs, policies, standards, procedures, and mandatory requirements are implemented in all WAG 7 day-to-day operations. The POC directs SH&QA compliance activities by providing technical and administrative direction to project staff, and through coordination with related RWMC SH&QA personnel. The POC reports directly to the WAG 7 manager and represents the WAG 7 manager in all SH&QA matters, including planning, compliance, and oversight of project activities at RWMC CERCLA sites. The POC may also provide direct field support of the project in the capacity of the HSO.

2.1.10 Environmental Compliance

The assigned environmental compliance coordinator oversees, monitors, and advises the WAG 7 field operations supervisor, or FTL performing site activities, on environmental issues and concerns by ensuring compliance with DOE orders, EPA regulations, and other regulations concerning the effects of site activities on the environment. The project environmental compliance coordinator provides support surveillance services for hazardous waste storage, transport, and disposal.

2.1.11 Quality Engineer

The quality engineer provides guidance on the task-site quality issues, when requested. The quality engineer may periodically observe task site activities and verify that WAG 7 site operations comply with the quality requirements pertaining to those activities. The quality engineer will prepare inspection criteria for materials procured in support of the project.

2.2 Task Site Responsibilities

2.2.1 Field Team Leader

The FTL represents the ER organization at the INEEL with delegated responsibility for the safe and successful completion of the project. The FTL will manage grouting operations and field sampling activities and execute the test plan. The FTL enforces site control, documents activities, and may conduct (or may delegate to appropriately trained alternate) the daily POD meeting or prejob briefing at the start

of the shift. Health and safety issues must be brought to the attention of the FTL. The FTL will report project status on a regular basis to the OU 7-13/14 ISG PM. Additional responsibilities include, but are not limited to:

- Ensuring that all field activities (e.g., maintenance, construction, operations, field sampling, and other field activities within WAG 7) are conducted in compliance with the integrated safety management system (ISMS) requirements and associated work orders or procedures
- Ensuring field team personnel follow RWMC SH&QA and operating requirements
- Obtaining and coordinating all resources needed to implement the WAG 7 field work, including equipment, labor, and administrative and technical permits and approvals.

If the FTL leaves the site, an alternate individual will be appointed to act as the FTL. Persons acting as FTL must meet all the FTL training requirements outlined in Section 4.

2.2.2 Sampling Team

The sampling team will perform the onsite tasks necessary to collect the contamination control, grout, and monolith samples, as identified in the Implementation Test and Field Plan (Loomis et al. 2001). The sampling team will consist of at least two members. The industrial hygienist (IH) and safety professional personnel will support the sampling team, as required, based on site-specific hazards and task evolutions. The sampling team will be led by a sampling FTL who may also perform other roles during the project.

2.2.3 Grouting Subcontractor

A grouting subcontractor will perform all grouting using a jet-grouting drill rig. The grouting subcontractor will have a lead driller (or superintendent) that serves as the single POC for all subcontractor safety issues at the site. The grouting subcontractor superintendent will supervise specialty subcontractor personnel (e.g., grout supplier) assigned to work at the site and report to the FTL on all field interface issues. The superintendent will work with the FTL, PM, and PI to accomplish day-to-day grouting operations, and identify and obtain additional resources needed at the site. Workers will report any health and safety issues that arise to the FTL or HSO and may stop work if an unsafe condition exists. The superintendent will also be asked to provide hazard and mitigation information regarding the nature of the grouting tasks during the POD meeting, and participate in job-site hazard walk-downs.

2.2.4 Field Team Members

All field team members, including BBWI and grouting subcontractor personnel, will understand and comply with the requirements of this HASP. The FTL (or designee) will conduct a formal prejob briefing or POD at the start of each shift. During the POD briefing, all daily tasks, associated hazards, hazard mitigation (i.e., engineering and administrative controls, required personal protective equipment [PPE], and work control documents), and emergency conditions and actions will be discussed. Input from the project HSO, IH, and safety personnel will be provided to clarify task health and safety requirements, as deemed appropriate. All grouting project personnel are encouraged to ask questions regarding site tasks and provide suggestions on ways to perform required tasks in a more safe and effective manner based on the lessons learned from previous day's activities.

Once at the site, personnel are responsible for identifying any potentially unsafe situations or conditions to the FTL or HSO for corrective action.

Note: If it is perceived that an unsafe condition poses an imminent danger, site personnel are authorized to stop work immediately and notify the FTL or HSO of the unsafe condition.

2.2.5 Nonfield Team Members

All persons who may be on the site, but are not part of the field team, are considered nonfield team members (e.g., surveyor, equipment operator, or other craft personnel not assigned to the project) for the purposes of this project. A person will be considered “onsite” when they are present in the controlled work area (CWA) boundary. Nonfield team members are considered occasional site workers, according to 29 CFR 1910.120/1926.65, and must receive site-specific HASP training prior to entering beyond the CWA of the project site. They must also meet all required training for the area of the site they have a need to access, based on the grouting tasks taking place. Also, a site supervisor (e.g., HSO or FTL) will supervise nonfield team personnel who have not completed their 3 days of supervised field experience in accordance with the HAZWOPER standard.

2.2.6 Visitors

All visitors with official business at the project sites (including BBWI personnel, representatives of DOE, and state or federal regulatory agencies) may only proceed into the CWA after meeting the following requirements:

- Receiving site-specific HASP training or hazard briefing, based on specific tasks taking place. Access to other controlled areas during down time or low-hazard tasks (i.e., no potential for exposure above action limits and no significant safety hazards) may only require a hazard or emergency response actions briefing.
- Signing a HASP training roster, and providing proof of meeting all training requirements specified in Section 4 (or required training for the area to be accessed during down time or low-hazard activities).
- Signing applicable safe work permits and job safety analysis forms for the area(s) to be accessed.
- Providing objective evidence of 29 CFR 1910.132 PPE training and wearing the appropriate PPE for the area of the site accessed.

A fully trained task-site representative (e.g., FTL or HSO [or a designated alternate]) will escort visitors when entering the CWA of the project site, as site conditions warrant and as deemed appropriate by the FTL.

Note: Visitors will not be allowed beyond the viewing area of the weather structure at Cold Test Pit South (or into the designated operations area at the Cold Test Pit North) during grouting tasks to minimize risks to workers and visitors. The determination as to any visitor’s “need” for access into the controlled work area of the weather structure or other work areas will be made by the HSO, in consultation with the IH and safety professional (as appropriate).

Note: Visitors will not be allowed into restricted areas (e.g., high-pressure grout injection tank, and monolith destructive examination) at anytime while grouting operations are underway.

A casual visitor to the task site is a person who does not have a specific task to perform or other official business to conduct at the task site. **Casual visitors are not permitted on the ISG project site.**

2.2.7 Health and Safety Officer

The HSO is the person assigned to the task site who serves as the primary contact for all health and safety issues. The HSO advises the FTL on all aspects of health and safety and is authorized to stop work at the task site if any operation threatens worker or public health or safety. The HSO may be assigned other responsibilities, as stated in other sections of this HASP, as long as they do not interfere with their primary responsibilities. The HSO is authorized to verify compliance to the HASP, conduct inspections and self assessments, require and monitor corrective actions, and monitor decontamination procedures, as appropriate. The SH&QA professionals at the task site (i.e., safety professional, IH, environmental coordinator, and facility representative, as necessary) support the HSO.

Persons assigned as the HSO, or alternate HSO, must be qualified (per the OSHA definition) to recognize and evaluate hazards, and will be given the authority to take or direct actions to ensure that workers are protected. While the HSO may also be the IH, safety professional, or in some cases the FTL (depending on the hazards and complexity and size of the activity involved), other task-site responsibilities of the HSO must not interfere with the primary role of the HSO at the task site.

If it is necessary for the HSO to leave the site, an alternate individual will be appointed by the HSO to fulfill this role, and his or her identity will be communicated to task-site personnel.

2.2.8 Industrial Hygienist

The assigned IH is the primary source for information regarding exposure assessments for grouting project chemical, physical, and biological hazards at the site. The IH assesses the potential for worker exposures to hazardous agents according to INEEL Safety and Health Manuals, MCPs, and accepted industry industrial hygiene practices and protocol. By participating in project planning, the IH assesses and recommends appropriate hazard controls for the protection of site personnel, operates and maintains airborne sampling and monitoring equipment, reviews for effectiveness, and recommends and assesses the use of PPE required in this HASP (recommending changes as appropriate).

Personnel showing health effects (i.e., signs and symptoms) resulting from possible exposure to hazardous agents will be referred to an occupational medical program (OMP) physician by the IH, supervisor, or HSO. The IH may have other duties at the site, as specified in other sections of this HASP, or in PRDs or MCPs.

During an emergency involving hazardous materials at the ISG project site, airborne sampling and monitoring results would be coordinated with members of the RWMC emergency response organization (ERO).

2.2.9 Safety Professional

The assigned INEEL safety professional reviews work packages, observes site activity, assesses compliance with the INEEL Safety and Health Manuals, signs safe work permits (SWPs) (if required), advises the FTL on required safety equipment, answers questions on safety issues and concerns, and recommends solutions to safety issues and concerns that arise at the task site. The safety professional may conduct periodic inspections in accordance with MCP-3449, "Safety and Health Inspections," and have other duties at the task site, as specified in other sections of this HASP, or in PRDs and MCPs. Copies of any inspections will be kept in the field file.

2.2.10 Fire Protection Engineer

An RWMC fire protection engineer is responsible for providing technical guidance to INEEL personnel regarding all fire protection issues, and may be assigned to review the work packages and conduct preoperational and operational fire hazard assessments. The INEEL fire department may also need to be advised of fuel storage areas (if required) and will provide authorization for all hot (i.e., radioactive) operations performed at the project site during times of high-to-extreme fire danger.

2.2.11 Radioactive Waste Management Complex Site Area Director

The RWMC SAD reports to the director of site operations and interfaces with the RWMC operations manager. The RWMC SAD is responsible for the following functions and processes in the RWMC area:

- All work processes and work packages performed in the RWMC area
- Establishing and executing a monthly, weekly, and daily operating plan for the RWMC area
- Executing the SH&QA program for the RWMC area
- Executing ISMS for the RWMC area
- Executing enhanced work planning for the RWMC area
- Executing the Voluntary Protection Program (VPP) in the RWMC area
- All environmental compliance within the RWMC area
- Executing that portion of the voluntary compliance order that pertains to the RWMC area
- Correcting the root cause functions of the accident investigation in the RWMC area
- Correcting the root cause functions of the voluntary compliance order for the RWMC area
- Authorizing start-up for new, or a restart of, activities within the RWMC SAD's area of jurisdiction.

2.2.12 Radioactive Waste Management Complex Work Authorization

The RWMC nuclear facility manager (NFM) is responsible for all operational activities at the RWMC and must be cognizant of work being conducted in the facility (including the cold test pits). The RWMC operations manager is responsible for evaluating all activities with respect to the RWMC safety authorization, and for approving all work packages and job safety analyses (JSAs). The RWMC NFM and operations manager will be kept informed of the project status through the RWMC shift supervisor and the RWMC POD for activities performed at the RWMC. All ISG activities will be scheduled through the RWMC, as well as through work packages and procedures, and opened daily at the RWMC shift desk, as required. The FTL (or designee) will obtain RWMC shift supervisor authorization (i.e., signature on work order or technical procedure) to initiate daily activities within the RWMC jurisdiction (cold test pits). The shift supervisor may serve as an advisor to task-site personnel with regard to RWMC operations.

3. RECORDKEEPING REQUIREMENTS

3.1 Industrial Hygiene Monitoring Records

The IH will record airborne monitoring and sampling data (both area and personal) collected for exposure assessments in the INEEL Hazards Assessment and Sampling System. All monitoring and sampling equipment will be maintained and calibrated according to INEEL procedures and the manufacturer's specifications. Industrial hygiene airborne monitoring and sampling exposure assessment data are treated as limited access information and maintained by the IH according to INEEL Companywide Manual 14, *Safety and Health Manual* procedures.

Personnel from the INEEL, or their representative, have a right to access industrial hygiene monitoring and sampling (both area and personal) exposure assessment data. Results from monitoring data will also be communicated to all field personnel during daily POD meetings and formal prejob briefings, in accordance with MCP-3003, "Performing Pre-Job Briefings and Post-Job Reviews."

3.2 Field Team Leader and Sampling Logbooks

The FTL will keep a record of daily task-site events in the FTL logbook. The sampling FTL will also maintain a logbook of all sampling activities and samples collected. All logbooks must be obtained from Administrative Record and Document Control (ARDC). Completed sample logbooks are submitted to the Sample Management Office (SMO) within 6 weeks of the project's completion. Logbooks will be maintained in accordance with MCP-231, "Logbooks for ER and D&D&D Projects."

3.3 Site Attendance Record

If required to be maintained separately, the site attendance record will be used to keep a record of all personnel (i.e., field team members and nonfield team members) onsite each day, and to assist the area warden with conducting personnel accountability should an evacuation take place (see Section 11 for emergency evacuation conditions). Personnel will only be required to sign in and out of the attendance record once each day. The FTL is responsible for maintaining the site attendance record and for ensuring that all personnel on the project site sign in (if required).

3.4 Administrative Record and Document Control Office

The ARDC will organize and maintain data and reports generated by ERP field activities. The ARDC maintains a supply of all controlled documents and provides a documented system for the control and release of controlled documents, reports, and records. Copies of the management plans for the ERP, this HASP, PLN-694, the QAPjP, and other documents pertaining to this work are maintained in the project file by the ARDC.

4. PERSONNEL TRAINING

All INEEL personnel will receive training, as specified in OSHA 29 CFR 1910.120/1926.65, INEEL Companywide Manuals 14A and 14B, *Safety and Health Manuals*, INEEL Companywide Manual 12, *Training and Qualifications*, and MCP-1764, "RWMC Operating Requirements," as applicable. Table 4-1 summarizes the project-specific training requirements for task-site personnel based on potential hazards and if access into the specific areas at the ISG sites is required. Specific training requirements for each worker may vary depending on the hazards associated with their individual job assignment, and required access into controlled work or restricted areas. Changes (i.e., adding or eliminating) to the training requirements listed in Table 4-1 may be necessary based on changing field conditions or work scope. Any changes to the requirements listed in Table 4-1 must be approved by the HSO, with concurrence from the FTL, PM, and IH (as applicable). These changes should be based on site-specific conditions and will generally be considered a minor change to the HASP, as defined by Form 412.11, "Document Management Control Systems (DMCS) Document Action Request (DAR)," instructions.

4.1 General Training

All project personnel are responsible for meeting required OU 7-13/14 ISG training (including applicable refresher training). Evidence of training will be maintained at the OU 7-13/14 ISG project trailer or electronically (e.g., Training Records and Information Network [TRAIN] [INEEL 2001]). Nonfield team personnel and visitors must be able to provide evidence of meeting required training for the area of the site they wish to access prior to being allowed into restricted project areas. Examples of acceptable written training documents include (1) a 40-Hour OSHA HAZWOPER Card, (2) a respirator authorization card, (3) a medic/first aid training card, or (4) a copy of an individual's, or department's, (INEEL only) TRAIN system printout demonstrating completion of training. Upon validation, a copy of the training certificate issued by an approved non-INEEL training vender or institution is also acceptable proof of training. As a minimum, all personnel who access the cold test pits, and are required to wear PPE, must provide objective evidence of having completed INEEL computer-based PPE training or equivalent, in accordance with 29 CFR 1910.132, "Personal Protective Equipment."

4.2 Project-Specific Training

Before beginning work at OU 7-13/14 ISG project sites, project-specific HASP training will be conducted by the HSO (or designee). This training will consist of a complete review of a controlled copy of the project HASP and attachments, applicable JSAs, SWPs (if required), work orders, and other applicable work control and authorization documents with time for discussion and questions. Project-specific training can be conducted in conjunction with, or separately from, the required formal prejob briefing (MCP-3003).

At the time of project-specific HASP training, personnel training records will be checked and verified to be current and complete for all the training requirements shown in Table 4-1. Once the HSO (or designee) has completed site-specific training, personnel will sign Form 361.25, "Group Read and Sign Training Roster," or equivalent, indicating that they have received this training, understand the project tasks and associated hazards and mitigations, and agree to follow all HASP and other applicable work control and safety requirements. Form 361.47 (or equivalent) training forms are available on the INEEL Intranet under "Forms."

Table 4-1. Required in situ grouting project-specific project training for site personnel.

Training	Field Team Leader and Health and Safety Officer	Other Field Team Members (Including Samplers)	Access into the Controlled Work Area	Support Zone Access Only
Project-specific HASP training ^a	Yes	Yes	Yes	
Project-site orientation briefing ^b				Yes
Fire extinguisher training (or equivalent)	Yes ^c	Yes ^c		
CPR, medic first aid	Yes ^c	Yes ^c		
Respirator training (contingency only)	d	d		
Site access training (blue or orange card)	Yes	Yes	Yes	

Note: Shaded fields indicate specific training is not required/applicable

a. Includes project-specific HAZCOM, site-access and security, decontamination and emergency response actions, as required by 29 CFR 1910.120(e).

b. Orientation includes briefing of site hazards, restricted and controlled areas, emergency response actions, and PPE requirements. Personnel receiving project-site orientation briefing only are limited to the support zone and must be escorted by fully HASP-trained project supervisor or designee.

c. At least one trained person on site when field team is working; HSO will determine appropriate number of personnel requiring training.

d. Only required if entering area requiring respiratory protection (e.g., action levels exceeded, IH sampling shows respirators required).

CPR = cardiopulmonary resuscitation HASP = health and safety plan

A trained HAZWOPER 8-hour supervisor (FTL or other HAZWOPER-supervisor-trained person) will monitor each newly 24-hour or 40-hour trained worker's performance to meet the 1 or 3 days of supervised field experience, respectively, in accordance with 29 CFR 1926.120(e). Following the supervised field experience period, the supervisor will complete Form 361.47, "HAZWOPER Supervised Field Experience Verification," or equivalent, to document the supervised field experience.

Note 1: Supervised field experience is only required if personnel have not previously completed this training at another CERCLA site (documented), or they are upgrading from 24- to 40-hour HAZWOPER training. A copy must be kept at the project site as evidence of training or be available electronically.

Note 2: Completed training project forms (Form 361.47, or equivalent) must be submitted to the ER training coordinator for inclusion in the TRAIN system within 5 working days of completion.

4.3 Daily Plan of the Day Briefing and Lessons Learned

A daily POD meeting will be conducted by the FTL, HSO, and safety professional, as applicable. During this meeting, daily tasks are to be outlined, hazards identified, hazard controls, mitigation, and work zones established, PPE requirements discussed, and employees' questions answered. At the completion of this meeting, any new work control documents will be read and signed (e.g., SWPs and JSAs). Particular emphasis will be placed on lessons learned from the previous day's activities and how tasks can be completed in the safest, most efficient manner. All personnel will be asked to contribute ideas to enhance worker safety and mitigate potential exposures at the project sites. This POD will be conducted as an informal meeting and the only required record will be to document the completion of the POD in the FTL logbook.

5. OCCUPATIONAL MEDICAL SURVEILLANCE PROGRAM

Task-site personnel will participate in the INEEL OMP, as required by DOE Order 5480.8a, "Contractor Occupational Medical Program," and OSHA 29 CFR 1910.120/1926.65. Medical surveillance examinations will be provided before assignment, annually, and after termination of hazardous waste site duties or employment. This includes personnel who are, or may be, exposed to hazardous substances at or above the OSHA permissible exposure limit (PEL), or published exposure limits, without regard to respirator use for 30 or more days per year. Personnel who wear a respirator in performance of their job, or who are required to take respirator training to perform their duties under this plan, must participate in the medical evaluation program for respirator use at least annually, as required by 29 CFR 1910.134.

A single copy of the ISG project HASP, job hazard analysis requirements, required PPE, confined space entry (as applicable), and other exposure related information will be made available, upon request, to the OMP physician (and subcontractor physicians) conducting medical surveillance for employees participating in this project. Exposure monitoring results and hazard information furnished to the OMP physician must be supplemented or updated annually as long as the employee is required to maintain a hazardous waste/material employee medical clearance.

The OMP physician will evaluate the physical ability of an employee to perform the work assigned, as identified in the site HASP or other job-related documentation. A documented medical clearance (e.g., physician's written opinion) will be provided to the employee and line management stating whether the employee has any detected medical condition that would place him or her at increased risk of material health impairment from work in hazardous waste operations, emergency response operations, respirator use areas, and confined space entry areas (as applicable). The physician may impose restrictions on the employee by limiting the amount and type of work performed. The OMP responsibilities, with regard to personnel assigned to hazardous waste site activities, include, but are not limited to, the following:

- Providing current comprehensive medical examinations (as determined by the examining physician) at an INEEL medical facility for full-time personnel
- Obtaining records or reports from employee's private physicians, as required by the OMP director
- Performing a medical evaluation on return-to-work cases following an absence in excess of 1 work week (40 consecutive work hours) resulting from illness or injury
- Conducting a medical evaluation in the event that management questions the ability of an employee to work, or if an employee questions his or her own ability to work.

The attending physician will evaluate all information provided, including medical questionnaires, physical exam findings, blood chemistry and urinalysis results, preexisting medical conditions, nature of work to be performed, actual and potential hazards and exposures, and other factors deemed appropriate by the physician for determining the following for each employee:

- Ability to perform relevant occupational tasks
- Ability to use respiratory protection

- Ability to work in other PPE and heat- or cold-stress environments
- Requirements for entry into substance-specific medical surveillance programs.

If the OMP does not have sufficient information to complete a medical evaluation before respirator training, the employee's supervisor will be notified. The employee will not be permitted to fit test until the needed information is provided and any additional examination or testing is completed.

5.1 Subcontractor Workers

Subcontractor task-site personnel will participate in a subcontractor medical surveillance program that satisfies the requirements of OSHA 29 CFR 1910.120/1926.65. This program must make medical examinations available before assignment, annually, and after termination of hazardous waste duties. The physician's written opinion, as defined by 29 CFR 1910.120(f)(7) (or equivalent), will serve as documentation that subcontractor personnel are fit for duty.

Medical data from the subcontractor employee's private physician, collected pursuant to hazardous material worker qualification, will be made available to the INEEL OMP physicians upon request.

5.2 Injuries on the Site

It is policy of the INEEL that an OMP physician examine all injured personnel if (1) an employee is injured on the job, (2) an employee is experiencing signs and symptoms consistent with exposure to a hazardous material, or (3) there is reason to believe that an employee has been exposed to toxic substances, or physical or radiological agents in excess of allowable limits.

Note: In the event of an injury, subcontractor employees will be taken to the closest INEEL medical facility to have an injury stabilized before transport to the subcontractor's treating physician or medical facility.

In the event of a known or suspected injury or illness because of exposure to a hazardous substance or physical or radiological agent, the employee will be transported to the nearest INEEL medical facility for evaluation and treatment, as necessary. The HSO is responsible for obtaining as much of the following information as is available to accompany the individual to the medical facility:

- Name, job title, work (site) location, and supervisor's name and phone number
- Substance, physical or radiological agent exposed to (known or suspected), and material safety data sheet (MSDS), if available
- Nature of the incident/injury, or exposure and related signs or symptoms of exposure
- First aid or other measures taken
- Locations, dates, and results of any airborne exposure monitoring or sampling
- Personal protective equipment in use during this work (e.g., type of respirator and cartridge used).

Further medical evaluation will be determined by the treating or examining physician, according to the signs and symptoms observed, hazard involved, exposure level, and specific medical surveillance requirements established by the OMP director in compliance with 29 CFR 1910.120/1926.65.

The RWMC shift supervisor will be contacted if any injury or illness occurs at cold test pit project sites. As soon as possible after an injured employee has been transported to the INEEL medical facility, the FTL or designee will make notifications, as indicated in Section 11.

5.3 Substance-Specific Medical Surveillance

All ISG tasks will be conducted in the Cold Test Pit South and North locations where there are no buried hazardous or radiological waste forms. None of the buried waste forms in the pit to be grouted are substances that require medical substance-specific surveillance. Additionally, all grout will arrive at the project site premixed so silica dust should not be a concern. Based on this, additional regulatory mandated substance-specific medical surveillance does not apply. If contaminants of concern are identified during the course of ISG tasks, exposures will be evaluated and quantified to determine if a substance-specific standard applies. If regulatory-mandated substance-specific standard action levels are triggered, then affected personnel will be enrolled in applicable medical surveillance programs.

6. ACCIDENT PREVENTION PROGRAM

In situ grouting activities present primarily physical hazards and limited potential chemical hazards to personnel conducting ISG tasks. It is important that all personnel understand and follow the project-specific requirements of this HASP. Engineering controls, hazard isolation, specialized work practices, and the use of PPE will all be implemented to eliminate or mitigate all potential hazards and exposures. However, every person on the site must play their role in the identification and control of hazards.

6.1 Voluntary Protection Program and Integrated Safety Management

The INEEL safety processes embrace the VPP and ISMS criteria, principles, and concepts as part of operational excellence. All levels of management are responsible for implementing safety policies and programs and for maintaining a safe and healthy work environment. Project personnel and subcontractors are expected to take a proactive role in preventing accidents, ensuring safe working conditions for themselves and fellow personnel, and complying with all work control documents and procedures.

The ISMS is focused on the system side of conducting operations, and VPP concentrates on the people side of conducting work, but both define work scope and identify, analyze, and mitigate hazards. The VPP is a process that promotes and encourages continuous safety improvement, however, it is not a requirement of any regulatory agency. The INEEL and affected subcontractors participate in VPP and integrated safety management for the safety of their employees. Additional information regarding the INEEL VPP and ISMS programs can be found in PDD-1005, *Site Operations Manual*. The five key elements of VPP and ISMS are:

<u>VPP</u>	<u>ISMS</u>
Management leadership	Define work scope
Employee involvement	Analyze hazards
Work site analysis	Develop and implement controls
Hazard prevention and control	Perform work within controls
Safety and health training	Provide feedback and improvement

6.2 General Safe-Work Practices

The following procedures are mandatory for all INEEL and subcontractor personnel working on the site. All site visitors entering the cold test pit controlled work areas must follow these procedures. The PM, FTL, and HSO are responsible for ensuring these hazard control practices are followed at the site.

Note: Failure to follow these practices may result in permanent removal from the site and other disciplinary actions.

- Limit cold test pit access to an authorized BBWI subcontractor, and visitor personnel only.
- All personnel have the authority to initiate **STOP WORK** actions according to MCP-553, "Stop Work Authority."

- Absolutely no eating, drinking, chewing gum or tobacco, smoking, applying cosmetics, or participating in any other practice that increases the probability of hand-to-mouth transfer and ingestion of materials, except in designated areas.
- Be aware of and comply with all safety signs, color codes, and barriers. Adhere to MCP-2714, "Safety Signs, Color Codes, and Barriers."
- Be alert for dangerous situations, strong or irritating odors, or airborne dusts or vapors. Report all potentially dangerous situations to the FTL or HSO.
- DO NOT enter restricted work areas or areas posted with DANGER signs (e.g., high pressure grout areas) unless authorized by the HSO and FTL.
- Be familiar with the physical characteristics of the task site including, but not limited to:
 - Wind direction
 - Accessibility of fellow personnel, equipment, and vehicles
 - Entry and exit routes from the weather structure
 - Communications at the task site and with the RWMC shift supervisor
 - Major roads and means of access to and from the Cold Test Pit South and North sites
 - Nearest water sources and fire fighting equipment
 - All RWMC and project warning devices and alarms
 - Capabilities and location of RWMC incident response team and INEEL fire department.
- Report all broken skin or open wounds to the HSO or FTL. The OMP physician will consider how the wound can be bandaged and will recommend PPE to be worn by the injured employee.

<p>Note: Personnel with unprotected wounds will not be permitted to enter the controlled work area without proper bandaging.</p>

- Prevent releases of hazardous materials, including those used at the task site. If a spill occurs, try to isolate the source (if possible, and if this does not create a greater exposure potential), and then report it to the FTL or HSO. The RWMC shift supervisor will be notified and additional actions taken, as described in Section 11. Appropriate spill response kits, or other confinement and absorbent materials, will be maintained at the task site.
- Project personnel will ensure that electrical equipment, wiring, cables, switches, and current overload protection devices meet applicable regulations and are maintained in a manner that provides protection for project personnel from shock hazards and injury, and prevents property damage in accordance with MCP-3650, "Chapter IX Level I Lockouts and Tagouts;" MCP-3651, "Chapter IX Level II Lockouts and Tagouts;" and RWMC supplements. Ground-fault protection will be provided whenever electrical equipment is used outdoors.

- Keep all ignition sources at least 15 m (50 ft) from explosive or flammable environments, and use nonsparking, explosion-proof equipment (if advised to do so by a safety professional).
- Personnel working in the controlled work area will implement the “buddy system” (see Subsection 6.5).
- Personnel who wear contact lenses will comply with MCP-2716, “Personal Protective Equipment.”

6.3 Chemical and Simulated Waste Contaminant Exposure Avoidance

The ISG activities will take place at the Cold Test Pit South and North locations. The only sources for exposure to chemical hazards are from the materials brought to the project site and encountered during post-grouting activities related to excavation and sampling of the waste forms in the monolith. The test pits were built with known quantities of materials simulating material in the SDA. Each contaminant has distinct physical, chemical, and mechanical properties that determine its toxicity. None of the materials present in the test pit are expected to create an exposure concern during ISG activities since they are buried and overburden soil is present above the pits. Additionally, the thrust block will provide a barrier at the Cold Test Pit South locations. If chemical or simulated waste-material contaminants are detected above established action levels during ISG activities, every effort will be made to isolate the source of these hazards through engineering controls and barriers (e.g., plastic sheeting), where feasible. Some of these contaminants may pose other exposure hazards from contact and skin absorption, and the implementation of avoidance practices will serve to minimize the potential for exposures. Some methods of exposure avoidance at the cold test pit sites include:

- Isolating known sources of contamination through the use of engineering controls or barriers
- When required, wearing all required PPE, inspecting all pieces before donning, and taping all seams
- If additional outer protective clothing is required, doff PPE following radiological protocols
- Wash hands, face, and other exposed body surfaces before eating, drinking, smoking, or participating in other activities that may provide a pathway for contaminants.

6.4 The Buddy System

The two-person or “buddy” system will be used at the cold test pit sites when personnel have entered into the controlled work area. The buddy system requires workers to assess and monitor their “buddy’s” mental and physical well being during the course of the workday. A “buddy” must be able to:

- Provide assistance
- Verify the integrity of PPE (when required)
- Observe their partner for signs and symptoms of heat stress, cold stress, or contaminant exposure
- Notify other personnel in the controlled work area if emergency assistance is needed.

Workers need to be able to see or hear and effectively communicate with their “buddy” at all times when in the controlled work area. Task-site personnel will continually check their “buddy” while work is performed in the controlled work area.

7. SITE CONTROL AND SECURITY

Based on the nature of the tasks to be completed and hazards at the Cold Test Pit South and North locations, modified HAZWOPER-defined work zones will be established. These zones will be established to facilitate visitor access to the treatability study site while providing controlled and restricted access to areas with known hazards. Entry into and exit out of all site areas will be controlled through the appropriate use of barriers, signs, and other measures that are described in detail in this section (refer to MCP-2714). Additionally, designated walkways and truck transportation routes will be established to control access to potential hazardous areas.

Personnel not directly involved with ISG activities will be excluded from entering established controlled work areas. Nonfield team members and visitors may be admitted to the support zone (SZ) and viewing areas, provided they are (1) on official business, (2) authorized by the HSO, and (3) have met all the site-specific training requirements for the area they have a demonstrated need to access, as listed on Table 4-1.

Note 1: Visitors will not be allowed beyond the viewing area of the weather structure at the Cold Test Pit South (or into the designated operations area at the Cold Test Pit North) during grouting tasks to minimize risks to workers and visitors. The determination as to any visitor's "need" for access into the controlled work area of the weather structure or other work areas will be made by the HSO in consultation with the IH and safety professional (as appropriate).

Note 2: Visitors will not be allowed into restricted areas (e.g., high pressure grout injection tank and monolith destructive examination) at anytime while grouting operations are underway.

Figure 7-1 illustrates the project site layout for the ISG Cold Test Pit South site. This figure represents the general configuration of the SZ, controlled work areas, and restricted work areas and is not intended to provide an exact layout or position of all equipment or area sizes. The weather structure will not be included in the Cold Test Pit North project site layout but all areas illustrated will be established. However, project progression (e.g., construction of the weather structure, ISG, and excavation of the monolith) and changing field conditions will warrant reconfiguring the layout, size, and orientation of these controlled areas. Changes, additions, or elimination of areas will be the decision of the HSO, in conjunction with the IH and safety professional, based on monitoring data and the nature of the activities taking place.

All potential safety and chemical hazards will be evaluated when delineating the CWA and restricted area locations and sizes. Barriers (e.g., rope, cones, and printed ribbon) will be used to delineate controlled work areas and designated truck traffic routes. These areas will also be posted to prevent inadvertent entry by unauthorized personnel. These areas may change in size and location as project tasks evolve, based on site monitoring data and as wind direction changes. Additionally, entrance and egress points may change based on these same factors. The ISG project areas will include:

- Support zone
- Walking corridor between administrative trailer and weather structure (when weather structure is in place)
- Truck traffic routes
- Designated work areas
- Restricted areas.

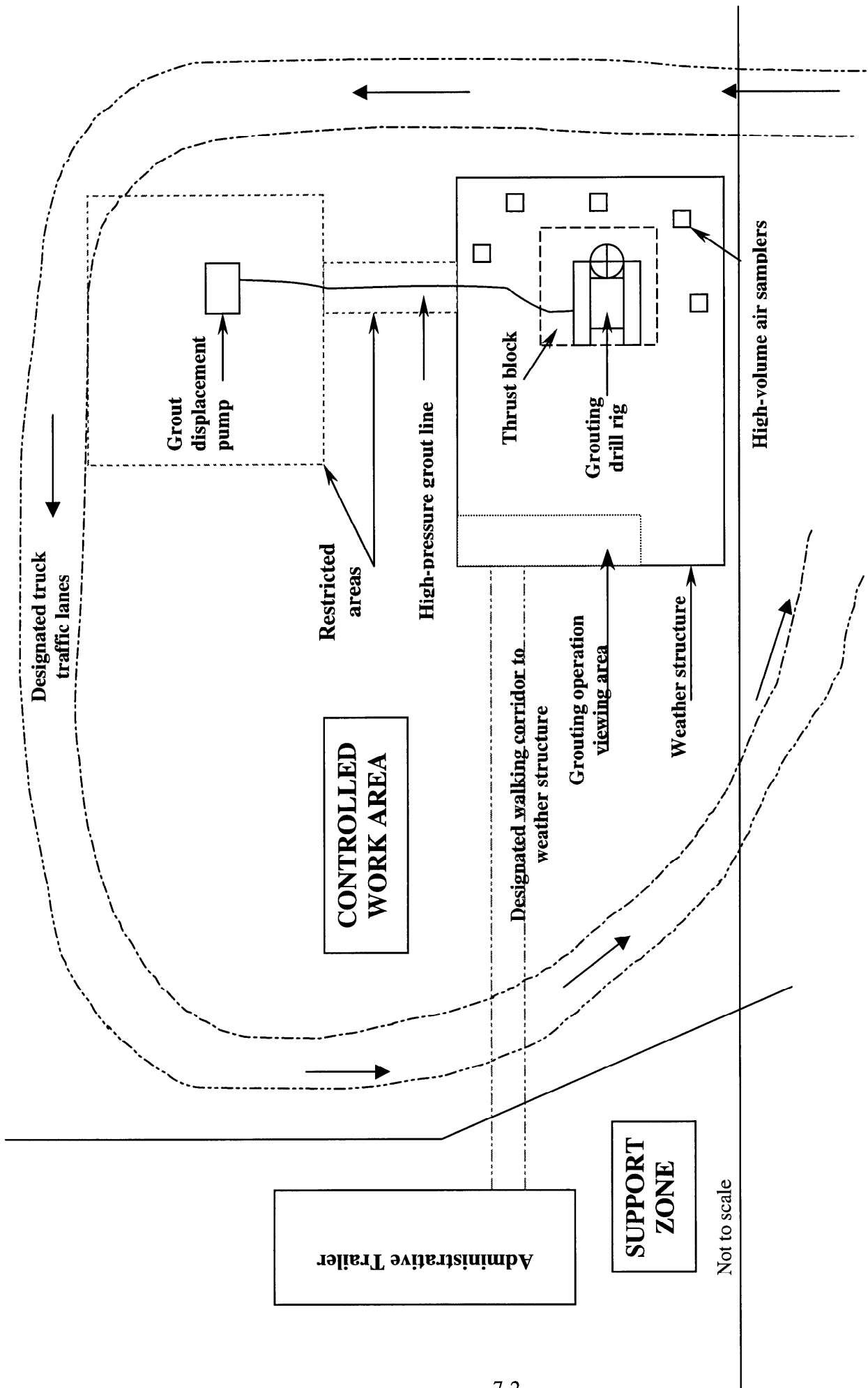


Figure 7-1. General configuration of the in situ grouting project site at the Cold Test Pit South.

Note: The safety professional and IH will assist the HSO in establishing the access requirements for the truck traffic routes, designated work areas, and restricted areas for the project-based equipment in use.

7.1 Support Zone

The SZ for the ISG project will consist of the areas outside of the controlled work and restricted areas of the cold test pits, and will generally include the ISG project administrative trailer, areas outside the weather structure at the Cold Test Pit South, established walking corridor, and other areas not otherwise marked or delineated. The SZ is established to prevent inadvertent entry into a more restrictive area of the project site, and to control access to the general ISG project site. Visitors and nonfield team members must be aware at all times of heavy equipment and vehicle traffic lanes intersecting with the SZ area.

Support facilities (e.g., project administrative trailer, vehicle parking, additional emergency equipment, extra PPE, and stored monitoring and sampling equipment) may all be located in the SZ. Visitors who do not have appropriate training to access controlled work areas, or have not received site-specific training, will be restricted to the SZ. All personnel who require entry into the Cold Test Pit South or North areas must complete required PPE training in order to wear the required PPE (Level D) to access the area.

7.2 Controlled Work Area

The CWAs will be large enough to encompass the equipment and nature of the tasks being conducted to prevent nonfield team members from being exposed to potential safety and health hazards associated with the ISG tasks. Only the minimum number of personnel required to safely perform the project tasks will be allowed into the CWA. The CWA is a controlled access zone at all times and an entry and exit point will be established at the periphery of the CWA to regulate the flow of personnel and equipment. The CWA boundary will be delineated with rope or printed hazard ribbon. All personnel who enter the CWA will wear the appropriate level of PPE for the degree and type of hazards present, as listed in Section 9.

Factors that will be considered when establishing the CWA boundary include (1) air monitoring data, (2) equipment in use, (3) the physical area necessary to conduct site operations, and (4) potential for debris being ejected from the CWA during destructive monolith examination activities. The boundary may be expanded or contracted, as this information becomes available, based on the aforementioned evaluations. The CWAs will initially be established for the weather structure activities, grouting equipment, and all support vehicles (e.g., grout mixing truck). The HSO, in conjunction with the safety professional and IH, will establish the CWAs. All CWAs will be delineated and posted with the appropriate signage based on the hazard being controlled.

7.3 Restricted Areas

Restricted areas will be established around hazardous operations or systems to prevent access to other than authorized personnel only. Examples of these areas include the high-pressure grout displacement pump and line. Other restricted areas may be established during ISG project activities based on the nature of the hazards and risk to site personnel. The HSO, in conjunction with the safety professional and IH, will establish restricted areas. All restricted areas will be delineated and posted with the appropriate signage based on the hazard being controlled. Entry into these areas may be allowed only when the systems are not operational, at the discretion of the FTL and HSO with concurrence from the grouting subcontractor superintendent.

7.4 Truck Traffic Routes and Walking Corridor

Truck traffic routes will be established for grout trucks entering the cold test pit areas. These routes will include a turnaround point and be delineated with cones or equivalent markers. All drivers will be instructed to use these traffic routes when entering and leaving the cold test pit areas.

A walking corridor will be delineated between the ISG administrative trailer (i.e., Cold Test Pit South upper level) and the observation area of the weather structure or designated viewing area at the Cold Test Pit North. Visitors and nonfield team members who utilize the observation area of the weather structure will utilize this corridor. The corridor will be delineated with cones or equivalent markers to prevent personnel accessing the weather structure from entering the CWA or restricted areas, and to keep personnel away from truck traffic routes.

7.5 Site Security

The ISG project site and Cold Test Pit South are controlled areas and access controls will be maintained during off-hours and weekends by ensuring the main cold test pit rope gate (or fence) is secured each night when exiting the area. The FTL has the primary responsibility for ensuring the area is secured. The grouting subcontractor will ensure that all subcontractor equipment and tools are secured each day when exiting the area. The HSO will ensure that all health and safety posting areas are intact when leaving the site and will be responsible for maintaining them for the duration of the project. Personnel are trained on site access and control requirements during project-specific HASP training and will not cross roped areas without the proper training and authorization, regardless of whether a sign is in place or not.

Note: Signs are routinely lost as a result of high winds at the cold test pits and will be replaced as soon as possible following discovery.

7.6 Designated Eating and Smoking Area

Ingestion of hazardous substances is possible when workers do not practice good personal hygiene habits. It is important to wash hands, face, and other exposed skin thoroughly after completion of work and before smoking, eating, drinking, and chewing gum or tobacco. For most project personnel, the field trailer will serve as the designated eating area. However, the designated eating areas for the grouting personnel will be determined by the project HSO, based on potential ingestion hazards, availability of hand washing facilities or methods, work area monitoring results, and proximity to potential chemical uptake sources. Once started, the need for continuous grouting operations will be evaluated when determining if eating will be permitted in the CWA for grouting operations personnel. Potential equipment damage or extended delays resulting from grout setting-up in the displacement pump could result from extended breaks in operations. Every effort will be made to accommodate the grouting personnel's need to stay within the CWA while complying with standard industrial hygiene exposure mitigation practices.

Smoking will only be permitted in designated smoking areas (e.g., areas with a fire extinguisher and smoking receptacle) and personnel will comply with all INEEL smoking policies, including disposing of smoking materials in the proper receptacle. Smoking may not be permitted in certain areas because of high or extreme fire danger.